PTO/SB/05 (08-03)
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UTILITY PATENT APPLICATION **TRANSMITTAL**

(Only for new nonprovisional applications under 37 CFR 1.53(b))

pond to a collection of informa-	ation unless it displays a valid Olvib control number.
Attorney Docket No.	0830.0
First Inventor	Thundat
Title	Multi-Purpose Multi-Funct Surface-Tension Microflu
Express Mail Label No.	EH963693991US

See MPEP ch	APPLICATION ELEMENTS papter 600 concerning utility patent application contents.	ADDRESS TO: Commission P.O. Box 1	Patent Application oner for Patents 450 VA 22313-1450					
(Submit a Applican See 37 3. Specific (preferre - Descrip - Cross I - Statem - Refere or a co - Backgr - Brief S - Brief D - Detaille - Claim(s	d arrangement set forth below) bitve title of the invention Reference to Related Applications ent Regarding Fed sponsored R & D nce to sequence listing, a table, mputer program listing appendix round of the Invention ummary of the Invention tescription of the Drawings (if filed) and Description	7. CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 8. Nucleotide and/or Amino Acid Sequence Submission (if applicable, all necessary) a. Computer Readable Form (CRF) b. Specification Sequence Listing on: i. CD-ROM or CD-R (2 copies); or ii. Paper c. Statements verifying identity of above copies ACCOMPANYING APPLICATION PARTS						
4. Drawing(s) (35 U.S.C. 113) [Total Sheets181		10. 37 CFR 3.73(b) Statement (when there is an assign						
5. Oath or Declaration [Total Sheets 2] a. Newly executed (original or copy)		11. English Translation Document (if applicable) 12. Information Disclosure Copies of IDS						
b. Copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed)		Statement (IDS)/PTO-1449 Citations 13. Preliminary Amendment 14. Return Receipt Postcard (MPEP 503)						
i. DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). 6. Application Data Sheet. See 37 CFR 1.76		(Should be specifically itemized) 15. Certified Copy of Priority Document(s) (if foreign priority is claimed) Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent. Other:						
18. If a CONTIN	NUING APPLICATION, check appropriate box, and s	upply the requisite information below an	d in the first se	ntence of the				
specification following the title, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No.:								
Prior application information: Examiner Art Unit: For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.								
	19. CORRESPO	NDENCE ADDRESS						
Custom	ner Number: 24298	OR L' Corre	spondence add	tress below				
	UT-Battelle, LLC							
Address	P.O. Box 2008 111B Union Valley Road							
City	Oak Ridge	State Tennessee	Zip Code	37831-6498				
Country	United States of America	Telephone 865.574.4180	Fax	865.574.0381				
Name (Print/Ty	pe) James M. Spicer	Registration No. (Attorney/Agent)	26,096					
Signature	Games M. X	Signature Date September 29, 2003						

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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FEE TRANSMITTAL		Complete if Known				
FEE IRANS	WILLIAL	Application Number				
for FY 2	003	Filing Date				
Effective 01/01/2003. Patent fees are subject to annual revision.		First Named Inventor	Thundat			
Applicant claims small entity status. See 37 CFR 1.27		Examiner Name				
		Art Unit				
TOTAL AMOUNT OF PAYMENT	(\$) 5,368.00	Attorney Docket No.	0830.0			

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None		DDITI	ONAI	FEE	S	
Deposit Account:		Entity	Small	Entity		
Denosit	Fee Code		Fee Code	Fee (\$)	Fee Description	
Account 13-1958		(\$) 130	2051		Surcharge - late filing fee or oath	Fee Paid
Number Deposit LUT Data Hand O	1051 1052	50	2052		Surcharge - late provisional filing fee or	
Account Name UT-Battelle, LLC	1002	00	2002		cover sheet	
The Director is authorized to: (check all that apply)	1053	130	1053		Non-English specification	\vdash
Charge fee(s) indicated below Credit any overpayments		2,520	1812	_,	For filing a request for ex parte reexamination	\vdash
Charge any additional fee(s) during the pendency of this application	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee	1805	1,840*	1805	1,840*	Requesting publication of SIR after	
to the above-identified deposit account.					Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	-
1. BASIC FILING FEE	1252	410	2252	205	Extension for reply within second month	
Large Entity Small Entity	1253	930	2253	465	Extension for reply within third month	
Fee Fee Fee Fee <u>Fee Description</u> Fee Paid Code (\$) Code (\$)	1254	1,450	2254	725	Extension for reply within fourth month	
1001 750 2001 375 Utility filing fee 750.00	1255	1,970	2255	985	Extension for reply within fifth month	
1002 330 2002 165 Design filing fee	1401	320	2401	160	Notice of Appeal	
1003 520 2003 260 Plant filing fee	1402	320	2402	160	Filing a brief in support of an appeal	
1004 750 2004 375 Reissue filing fee	1403	280	2403	140	Request for oral hearing	
1005 160 2005 80 Provisional filing fee	1451	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 750.00	1452	110	2452	55	Petition to revive - unavoidable	
	1453	1,300	2453	650	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501	1,300	2501	650	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	470	2502	235	Design issue fee	
Total Claims 265 -20** = 245 X 18 = 4410	1503	630	2503	315	Plant issue fee	
Claims 5 - 3" = 2 X 64 = 100	1460	130	1460	130	Petitions to the Commissioner	L
Multiple Dependent 0 =0	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity Small Entity	1806	180	1806	180	Submission of Information Disclosure Stmt	
Fee Fee Fee Fee Fee Description Code (\$)	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1202 18 2202 9 Claims in excess of 20 1201 84 2201 42 Independent claims in excess of 3	1809	750	2809	375	Filing a submission after final rejection	
1203 280 2203 140 Multiple dependent claim, if not paid	1810	750	2810	375	(37 CFR 1.129(a)) For each additional invention to be	
1204 84 2204 42 ** Reissue independent claims over original patent	1004	750	2004	275	examined (37 CFR 1.129(b))	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1801 1802	900	2801 1802	900	Request for Continued Examination (RCE) Request for expedited examination of a design application	
4 570 00	Other	fee (sp	ecify) _			
SUBTOTAL (2) (\$) 4,5/8.00 **or number previously paid, if greater; For Reissues, see above	*Redu	iced by	Basic I	Filing F	ee Paid SUBTOTAL (3) (\$) 40.00	5

SUBMITTED BY (Complete (if applicable))						
Name (Print/Type)	James M. Spicer	10	Registration No. (Attorney/Agent)	26,096	Telephone	865.574.4180
Signature	James M Spicer					September 29, 2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Ú.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.